

Abstract

Surface covering components that include a topcoat layer with different gloss levels in various regions on the top coat layer, and methods of manufacturing such surface covering components, are disclosed. The surface covering components include a coating layer that includes regions that have a relatively higher gloss, and regions with a relatively lower gloss. The differential gloss is provided by coating a substrate with a UV-curable coating composition, subjecting a first region of the surface coating to polymerization under a first set of conditions, and subjecting a second region of the surface coating to polymerization under a second set of conditions. The UV-curable coating compositions include UV-curable components and one or more flattening agents. The different polymerization conditions involve applying various photoinitiators, thermal initiators and/or cure altering agents to some regions of the coated substrate, and not applying these components to other regions of the substrate. The components are applied in the form of a pattern. Regions in contact with these components are cured at different rates in one step or in different steps, for example, sequential UV and EB irradiation or UV irradiation at different wavelengths and/or exposure times. The resulting surface coverings and surface covering substrates have differential gloss in register with the printed and/or sprayed patterns.